AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently amended) A tile lighting system, comprising:

a plurality of addressable lighting units configured in a flexible string and ~~disposed~~ arranged in a grid;

a controller for controlling ~~the~~ illumination ~~from~~ generated by the addressable lighting units; and

~~[[a]]~~ at least one substantially translucent ~~light diffusing~~ cover ~~for covering~~ disposed over the grid for receiving and diffusing the illumination from the addressable lighting units.

2. (Currently amended) [[A]] The tile lighting system of claim 1, wherein the at least one substantially translucent ~~light diffusing~~ cover ~~includes~~ comprises a phosphorescent material.

3. (Cancelled)

4. (Currently amended) [[A]] The tile lighting system of claim 1, wherein the ~~light diffusing~~ at least one substantially translucent cover ~~is provided with~~ has a geometric shape.

5. (Currently amended) [[A]] The tile lighting system of claim 1, wherein the ~~light diffusing~~ at least one substantially translucent cover ~~is provided with~~ has an irregular shape ~~pattern~~.

6. (Currently amended) A tile lighting arrangement, comprising at least two ~~system~~ systems of claim 1[[,]] comprising complementary-shaped substantially translucent covers and ~~wherein the lighting system is configured to be~~ disposed in close proximity to each other ~~similar lighting systems in a tile arrangement~~.

7. (Currently amended) [[A]] The tile lighting system of claim 1, wherein the lighting units are controlled using a string light protocol.

8-11. (Cancelled)

12. (Currently amended) A tile ~~light~~ lighting system, comprising:

a plurality of addressable LED lighting units disposed on a circuit board in an array, wherein the addressable LED lighting units respond to control signals provided using a serial addressing protocol to produce mixed light of varying colors, wherein at least one of the addressable lighting units receives data intended for at least two lighting units of the plurality of addressable lighting units and selectively responds to data addressed to it; and

a diffuser for receiving light from the plurality of addressable lighting units.

13. (Currently amended) [[A]] The tile ~~light~~ lighting system of claim 12, wherein the diffuser includes a phosphorescent material.

14. (Currently amended) [[A]] The tile ~~light~~ lighting system of claim 12, wherein the diffuser is substantially translucent.

15. (Currently amended) [[A]] The tile ~~light~~ lighting system of claim 12, wherein the diffuser ~~is provided with~~ has a geometric shape.

16. (Currently amended) [[A]] The tile ~~light~~ lighting system of claim 12, wherein the diffuser ~~is provided with~~ has an irregular shape ~~pattern~~.

17. (Currently amended) ~~A tile light~~ The tile lighting system of claim 12, wherein the mixed light of varying colors produced by the addressable LED lighting units in response to the control signals comprises a plurality of lighting effects, the system further comprising an authoring system ~~facility~~ for creating a graphical representation of at least one lighting effect of the plurality of lighting effects and converting the graphical representation of the at least one lighting

effect into the control signals for the addressable LED lighting units ~~authoring effects for the lighting system~~.

18. (Currently amended) ~~A tile light~~The tile lighting system of claim 17, wherein the authoring system ~~facility~~ is an object-oriented authoring facility.

19. (Cancelled)

20. (Currently amended) ~~A tile light~~ The tile lighting system of claim 17, wherein [[an]] the at least one lighting effect produced by the addressable LED lighting units ~~displayed on the tile light~~ corresponds to ~~an incoming~~ a video signal received at the authoring system.

21-22. (Cancelled)

23. (Currently amended) A tile light, comprising:

a plurality of ~~linear~~ LED lighting units disposed only about ~~the~~ a perimeter of a substantially rectangular housing; and

a substantially translucent diffuser disposed over the housing for receiving and diffusing light from the lighting units.

24. (Currently amended) [[A]] The tile light of claim 23, wherein the diffuser includes a phosphorescent material.

25-27. (Cancelled).

28. (Currently amended) A tile light ~~of claim 23~~, comprising:

a plurality of LED lighting units disposed about a perimeter of a substantially rectangular housing;

a diffuser for diffusing light from the lighting units; and

~~further comprising~~ a reflector interior to the housing for providing a consistent level of light output to different portions of the diffuser.

29. (Currently amended) [[A]] The tile light of claim 23, wherein the housing is divided into a plurality of cells.

30. (Currently amended) [[A]] The tile light of claim [[23]] 29, wherein the cells are substantially rectangular.

31. (Currently amended) A tile light ~~of claim 23,~~ comprising:

a plurality of LED lighting units disposed about a perimeter of a substantially rectangular housing;

a diffuser for diffusing light from the lighting units; and

wherein the housing is divided into a plurality of cells, and wherein the cells are triangular.

32-34. (Cancelled).

35. (Currently amended) [[A]] The tile light of claim 23, wherein the tile light is disposed in an architectural environment.

36. (Currently amended) [[A]] The tile light of claim 23, wherein the tile light is disposed on a building exterior.

37. (Currently amended) A lighting system, comprising:

a series of LED-based addressable lighting units for producing mixed light of varying colors, wherein each lighting unit is configured to respond to data addressed to it in a serial addressing protocol, wherein the series of lighting units is configured in a flexible string; and

a fastening facility for holding the flexible string in a predetermined configuration.

38. (Currently amended) [[A]] The lighting system of claim 37, wherein the fastening facility comprises at least one [[is a]] substantially linear channel for holding at least a portion of the flexible string.

39. (Currently amended) A lighting system ~~of claim 37~~, comprising:

~~wherein the series of lighting units is configured in a flexible string; and~~

a series of LED-based lighting units configured in a flexible string, wherein each lighting unit is configured to respond to data addressed to it in a serial addressing protocol; and

a fastening facility for holding the flexible string in a predetermined configuration, wherein the fastening facility holds the flexible string in an array.

40. (Currently amended) [[A]] The lighting system of claim 37, wherein the mixed light of varying colors produced by the addressable LED lighting units comprises a plurality of lighting effects, the system further comprising an authoring system for ~~authoring effects for the lighting system~~ creating graphical representations of the lighting effects and converting the graphical representations of the lighting effects into the data addressed to the addressable LED lighting units.

41. (Currently amended) [[A]] The lighting system of claim 40, wherein the authoring system is an object-oriented authoring facility.

42. (Cancelled).

43. (Currently amended) [[A]] The lighting system of claim ~~39~~ 40, wherein a lighting [[an]] effect produced by the addressable LED lighting units ~~displayed on the array~~ corresponds to [[an]] a ~~incoming~~ video signal received at the authoring system.

44. (Currently amended) [[A]] The lighting system of claim 39, wherein the array is disposed in an architectural environment.

45. (Currently amended) [[A]] The lighting system of claim 39, wherein the array is disposed on a building exterior.

46. (New) The lighting system of claim 37, wherein the fastening facility comprises a push-through assembly mechanism.

47. (Currently amended) A modular component for a lighting system, comprising:

a ~~series~~ plurality of addressable LED-based lighting units disposed in an array on a circuit board, wherein each addressable lighting unit of the plurality of addressable lighting units is configured to respond to data addressed to it in a serial addressing protocol, by receiving data intended for at least two lighting units of the plurality of addressable lighting units and selectively responding to data addressed to it.

48.-51. (Cancelled).

52. (Currently amended) [[A]] The component of claim 47, wherein the circuit board is ~~a~~ flexible ~~circuit board~~.

53. (Currently amended) [[A]] The component of claim 47, wherein the circuit board is a printed circuit board.

54.-55. (Cancelled).

56. (Currently amended) A lighting system, comprising:

a plurality of modular components, wherein each modular component includes a ~~series~~ plurality of addressable LED-based lighting units disposed in an array on a circuit board, wherein each addressable lighting unit is configured to respond to data addressed to it in a serial addressing protocol, by receiving data intended for at least two lighting units of the plurality of addressable lighting units and selectively responding to data addressed to it.

57. (Currently amended) [[A]] The system of claim 56, ~~wherein~~ comprising at least two modular components of the plurality of modular components ~~are~~ disposed adjacent to each other ~~to form a large array of modular components~~.

58. (Currently amended) [[A]] The system of claim 56, wherein the addressable LED-based lighting units are configured to produce mixed light of varying colors comprising a plurality of lighting effects, the system further comprising an authoring system for creating a graphical representation of at least one lighting effect of the plurality of lighting effects and converting the graphical representation of the at least one lighting effect into the data addressed to the addressable LED lighting units ~~authoring effects for the lighting system~~.

59. (Currently amended) [[A]] The system of claim 58, wherein the authoring system is an object-oriented authoring facility.

60. (Cancelled).

61. (Currently amended) [[A]] The system of claim 58, wherein the at least one lighting ~~an~~ effect ~~displayed on the array~~produced by the addressable LED lighting units corresponds to ~~an incoming~~ a video signal received at the authoring system.

62. (Currently amended) [[A]] The system of claim 58, wherein the array is disposed in an architectural environment.

63. (Currently amended) [[A]] The system of claim 58, wherein the array is disposed on a building exterior.

64. (Currently amended) A method of providing ~~a tile lighting system~~ illumination, comprising:

~~providing a plurality~~ arranging a flexible string of addressable LED lighting units ~~configured in a flexible string and disposed~~ in a grid;

~~providing a controller for~~ controlling [[the]] illumination ~~from~~ generated by the addressable lighting units; and

covering the grid with a light diffusing cover.

65. (Currently amended) [[A]] The method of claim 64, wherein the light diffusing cover ~~includes~~ comprises a phosphorescent material.

66. (Currently amended) [[A]] The method of claim 64, wherein the light diffusing cover is substantially translucent.

67. (Currently amended) [[A]] The method of claim 64, wherein the light diffusing cover ~~is provided with~~ has a geometric shape.

68. (Currently amended) [[A]] The method of claim 64, wherein the light diffusing cover ~~is provided with~~ has an irregular ~~pattern~~ shape.

69. (Cancelled)

70. (Currently amended) [[A]] The method of claim 64, wherein the lighting units are controlled using a string light protocol.

71-74. (Cancelled)

75. (Currently amended) A method of providing a tile lighting system ~~light~~, comprising:

providing a plurality of addressable LED lighting units disposed on a circuit board in an array, wherein the addressable LED lighting units respond to control signals provided using a serial addressing protocol to produce mixed light of varying colors, wherein at least one of the addressable lighting units receives data intended for at least two lighting units of the plurality of addressable lighting units and selectively responds to data addressed to it; and

providing a diffuser for receiving light from the plurality of addressable lighting units.

76. (Currently amended) [[A]] The method of claim 75, wherein the diffuser ~~includes~~ comprises a phosphorescent material.

77. (Currently amended) [[A]] The method of claim 75, wherein the diffuser is substantially translucent.

78. (Currently amended) [[A]] The method of claim 75, wherein the diffuser ~~is provided with~~ has a geometric shape.

79. (Currently amended) [[A]] The method of claim 75, wherein the diffuser ~~is provided with~~ has an irregular ~~pattern~~ shape.

80-85. (Cancelled)

86. (Currently amended) A method of providing a tile light, comprising:

providing a plurality of ~~linear~~ LED lighting units disposed only about ~~the~~ a perimeter of a substantially rectangular housing; and

providing a substantially translucent diffuser for diffusing light from the lighting units.

87. (Currently amended) [[A]] The method of claim 86, wherein the diffuser ~~includes~~ comprises a phosphorescent material.

88. (Cancelled)

89. (Currently amended) [[A]] The method of claim 86, wherein the diffuser ~~is provided with~~ has a geometric shape.

90. (Currently amended) [[A]] The method of claim 86, wherein the diffuser ~~is provided with~~ has an irregular ~~pattern~~ shape.

91. (Currently amended) A method of providing a tile light ~~claim 86, further~~ comprising:

providing a plurality of LED lighting units disposed about a perimeter of a substantially rectangular housing;

providing a diffuser for diffusing light from the lighting units; and

providing a reflector interior to the housing for providing a consistent level of light output to different portions of the diffuser.

92. (Currently amended) [[A]] The method of claim 86, wherein the housing is divided into a plurality of cells.

93. (Currently amended) [[A]] The method of claim [[86]] 92, wherein the cells are rectangular.

94. (Currently amended) A method of providing a tile light comprising; ~~claim 86,~~

providing a plurality of LED lighting units disposed about a perimeter of a substantially rectangular housing;

providing a diffuser for diffusing light from the lighting units; and

wherein the housing is divided into a plurality of cells, and wherein the cells are triangular.

95-99. (Cancelled)

100. (Currently amended) A method of providing lighting, comprising:

~~providing~~ arranging a series of LED-based lighting units in a flexible string, wherein each lighting unit is configured to respond to data addressed to it in a serial addressing protocol, ~~wherein the series of lighting units is configured in a flexible string~~; and

~~providing a~~ fastening ~~facility for holding~~ the flexible string in a predetermined configuration.

101. (Currently amended) ~~A lighting~~ The method of claim 100, wherein the flexible string is held in ~~the fastening facility is~~ a ~~substantially linear~~ channel ~~for holding the~~ shaped in the predetermined configuration ~~flexible string~~.

102. (Currently amended) A method of providing lighting, comprising; ~~A lighting method of claim 100,~~

providing a series of LED-based lighting units, wherein each lighting unit is configured to respond to data addressed to it in a serial addressing protocol, wherein the series of lighting units is configured in a flexible string;

providing a fastening facility for holding the flexible string in a predetermined configuration; and

wherein the fastening facility holds the flexible string in an array.

103-108. (Cancelled)

109. (Currently amended) A method of providing a modular component for a lighting system, comprising:

~~providing a series~~ disposing a plurality of addressable LED-based lighting units ~~disposed~~ in an array on a circuit board, wherein each addressable lighting unit of the plurality of addressable lighting units is configured to respond to data addressed to it in a serial addressing protocol, by receiving data intended for at least two lighting units of the plurality of addressable lighting units and selectively responding to data addressed to it.

110-113. (Cancelled)

114. (Currently amended) [[A]] The method of claim 109, wherein the circuit board is [[a]] flexible ~~circuit board~~.

115. (Currently amended) [[A]] The method of claim 109, wherein the circuit board is a printed circuit board.

116-117. (Cancelled)

118. (Currently amended) A method of providing a lighting system, comprising:

providing a plurality of modular components, wherein each modular component includes a ~~series~~ plurality of addressable LED-based lighting units disposed in an array on a circuit board, wherein each addressable lighting unit is configured to respond to data addressed to it in a serial

addressing protocol, by receiving data intended for at least two lighting units of the plurality of addressable lighting units and selectively responding to data addressed to it.

119. (Currently amended) [[A]] The method of claim 118, wherein the modular components are disposed adjacent to each other to form a large array of modular components.

120. (Currently amended) [[A]] The method of claim 118, further comprising an authoring system for authoring effects for the lighting system.

121. (Currently amended) [[A]] The method of claim 120, wherein the authoring system is an object-oriented authoring facility.

122. (Currently amended) [[A]] The method of claim 120, wherein an effect displayed on the large array corresponds to a graphical representation of the authoring facility.

123. (Currently amended) [[A]] The method of claim 120, wherein an effect displayed on the array corresponds to an incoming video signal.

124. (Currently amended) [[A]] The method of claim 120, wherein the array is disposed in an architectural environment.

125. (Currently amended) [[A]] The method of claim 118, wherein the array is disposed on a building exterior.

126. (New) The tile lighting system of claim 1, wherein the illumination generated by the addressable lighting units, when controlled by the controller, includes a plurality of lighting effects.

127. (New) A tile lighting arrangement, comprising two or more systems of claim 126, wherein the plurality of lighting effects includes at least one lighting effect that is coordinated between the two or more systems.

128. (New) The system of claim 58, wherein the addressable LED lighting units of at least two modular components of the plurality of modular components are configured to generate at least one lighting effect of the plurality of lighting effects that is coordinated between the at least two modular components.

129. (New) A method for providing illumination, comprising:

arranging a first flexible string of addressable lighting units in a first grid;

covering the first grid with a first light diffusing cover;

arranging a second flexible string of addressable lighting units in a second grid;

covering the second grid with a second light diffusing cover, wherein the first and second light diffusing covers are complementary shaped;

disposing the first grid in close proximity to the second grid such that the first light diffusing cover is adjacent to the second light diffusing cover; and

controlling the illumination from the first and second strings of addressable lighting units.

130. (New) The method of claim 64, wherein the addressable LED-based lighting units are configured to produce mixed light of varying colors comprising a plurality of lighting effects, the method further comprising:

creating a graphical representation of at least one lighting effect; and

converting the graphical representation of the at least one lighting effect into control signals for controlling the addressable LED lighting units.

131. (New) The method of claim 75, wherein the addressable LED-based lighting units are configured to produce mixed light of varying colors comprising a plurality of lighting effects, the method further comprising:

creating a graphical representation of at least one lighting effect; and

converting the graphical representation of the at least one lighting effect into the control signals for controlling the addressable LED lighting units.

132. (New) The method of claim 131, wherein the at least one lighting effect produced by the addressable LED lighting units corresponds to a video signal.